

REMARKS

In the Office Action dated July 8, 2004, claims 1, 5, 6, and 8-12 were rejected under 35 U.S.C. § 102 over U.S. Patent 5,996,687 (Pringle); claims 8-12 were rejected under § 103 over Pringle alone; and claims 1, 2, and 5-12 were rejected under § 103 over U.S. Patent No. 5,831,156 (Mullins) in view of Pringle.

Applicant acknowledges the indication that claims 3 and 4 would be allowable if amended into independent form. Claim 4 has been amended into independent form to place the claim in condition for allowance. The remaining claims 2 and 5-12 have been amended to depend from claim 4.

Newly added independent claims 13-15 are allowable over the cited references. Claim 13 recites a system of measuring flow rate in a wellbore that comprises a variable orifice valve having plural settings comprising a fully closed setting, a fully open setting, and at least an intermediate setting between the fully closed and fully open settings. The system further includes a differential pressure measurement mechanism to, during a production stage, measure the flow rate through the variable orifice valve based on a flow coefficient derived for each of the plural settings. The system further includes a computer to, during an experimental stage, derive the flow coefficient for each of the plural settings based on measurements of the differential pressure measurement mechanism. None of the cited references disclose the computer to, during an experimental stage, derive the flow coefficient for each of the plural settings based on measurements of the differential pressure measurement mechanism.

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In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (SHL.0218D1US).

Respectfully submitted,

Date: _____

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